

Bacterial Water Contamination: Associated Risk Factors and Beliefs in a Rural Community in Northern Haiti

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Haiti is arguably the poorest country in the Western Hemisphere, and thousands of its residents are living without access to clean drinking water. This simple issue causes terrible health problems like diarrhea, malnutrition, and severe dehydration in children and adults alike. I wanted to know the extent of bacterial contamination and points of risk relating to such in the rural community of Mol, Haiti before the implementation of a chlorine water filtration system in it. A handful of community drinking water sources were tested for the presence of total coliform bacteria, as well as a total coliform c.f.u. count before and after local methods of purification. An accompanying questionnaire was verbally given to community members about their general water use. I found there to be widespread contamination, even after the locals' efforts to purify the water themselves. My research indicates that among the many risks factors that are present, it is a lack of proper resources and education that contributes to the contamination the most. Further research could be done to investigate beneficial methods to mitigate this risk by distributing resources and/or education in the community.

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